

This page is mainly introduced the MAR-M 246 Cast superalloy Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of MAR-M 246 Cast superalloy, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Superalloys MAR-M 246 Cast superalloy

MAR-M 246 Cast superalloy Standard Number:

ITEM	Standard Number	Descriptions
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MAR-M 246 Cast superalloy Chemical composition (mass fraction) (wt.%)

Chemical			Min.(%)				Max.(%)		
C			0.13				0.17		
Si							0.20		
Mn							0.20		
S							0.015		
Cr			8.00				10.00		
Ni							Bal		
Mo			2.25				2.75		
Co			9.00				11.00		
W			9.00				11.00		
Al			5.25				5.75		
Cu							0.10		
Ti			1.25				1.75		
Fe							1.00		
Ta			1.25				1.75		
Zr			0.03				0.08		
B			0.010				0.020		
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

cast superalloy of MAR-M 246

MAR-M 246 Cast superalloy Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv $\geq$ /J
HBS	123-321	-
HRC	30	-

MAR-M 246 Cast superalloy Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv $\geq$ /J
HBS	235-268	-
HRC	30	-

MAR-M 246 Cast superalloy Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

MAR-M 246 Cast superalloy Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting

Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

We can produce Superalloys the specifications follows: